THINGS THEY DON’T TELL YOU

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INTRODUCTION

THEY?

ABOUT ME

- Consultant at group9
- Applying OSS BPM in (enterprise) projects since 2009
- Public, Pension, Energy and Mobility sectors
- Camunda Champion

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YOU?

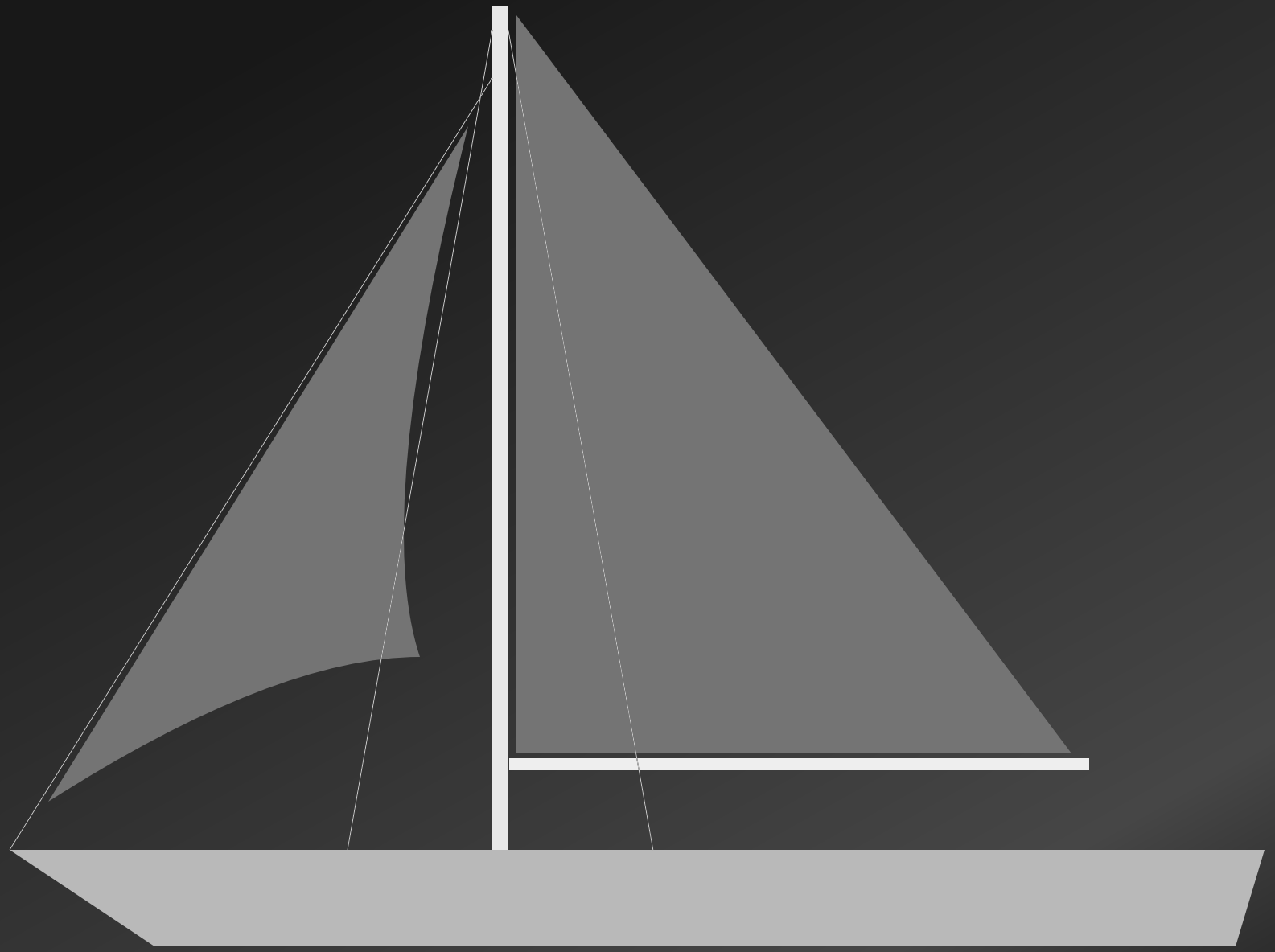
WABABGO

- They didn’t tell you… **WHY?**
- Because we **have to**
- Because so and so **told us to**
- Because it’s going to be **better**, *we think*
- Because… **technology**! Woo hoo! 🥳
- Because… **reasons**…?
- …

> *Because we care.*

DISCLAIMER

Much of the content in this presentation stems from interactions with and experiences of real-world people in projects. Any apparent likeness is therefore completely non-coincidental and deliberate. My sincere gratitude goes out to those who **did** tell *me* these things, so that I might learn. Simultaneously, I am fully aware there are many things still I am *not* aware of and/or that nobody has told me. No animals were harmed while producing this presentation.



BUSINESS

Why, What and How

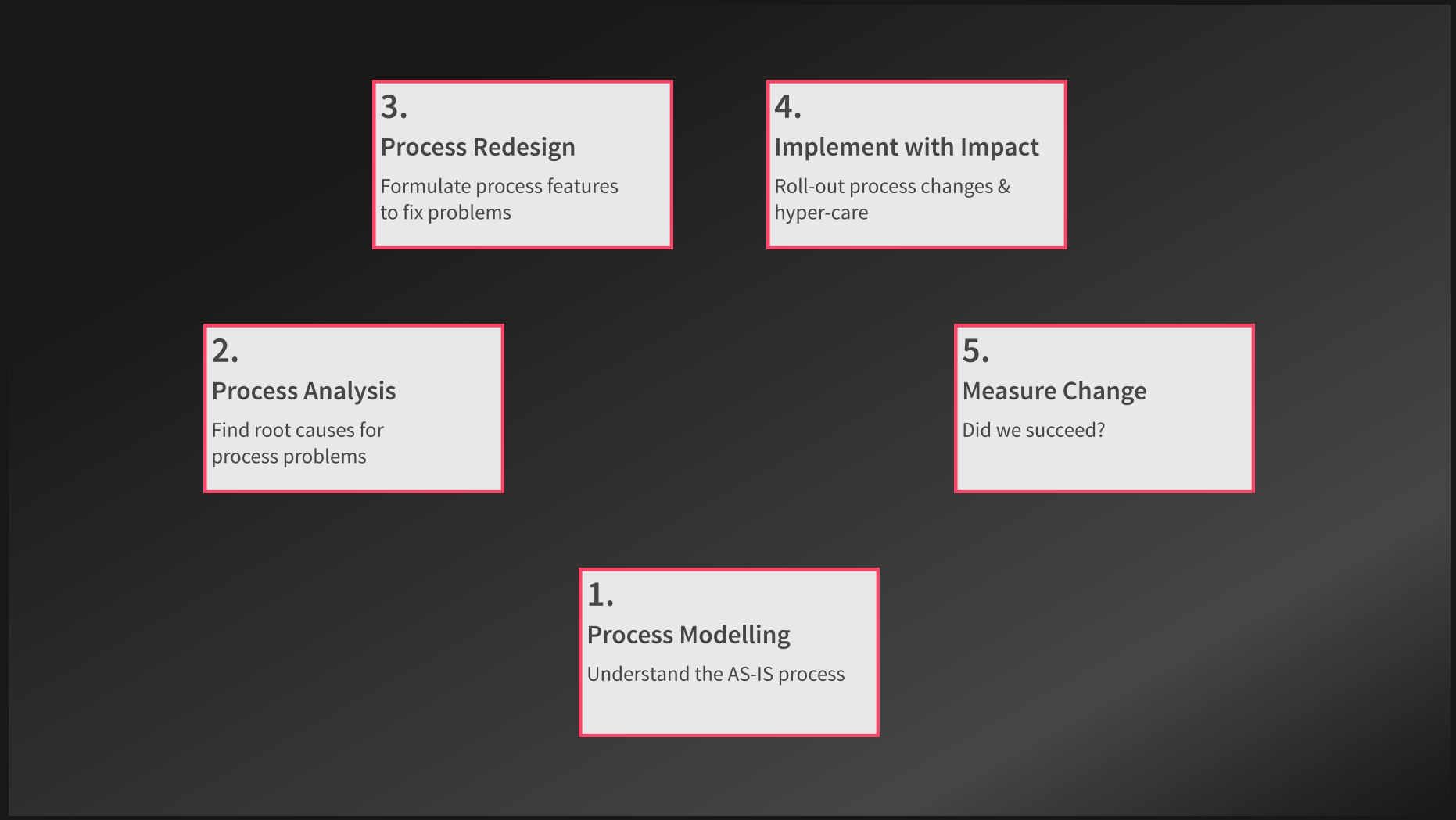
WHY

Big Picture Thinking

WHY

- Because **processes execute strategy** [18, 17]
- Aiming for goals: transparency, consistency, efficiency, auditability
- Into the cycle… or…

THE CYCLE [1]



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THE STRATEGY [1]

2.
Structure & culture
Clear roles and responsibilities about process ownership

1.
Process Identification
What are our organization's processes?

3.
Performance Mgt.
How do we measure success?
How healthy are our processes?

0.
Strategy
Strategy is crucial for processes as it provides a clear roadmap and direction, ensuring that resources and efforts are aligned toward achieving specific organizational goals and objectives efficiently

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THE CYCLE AND THE STRATEGY [1]

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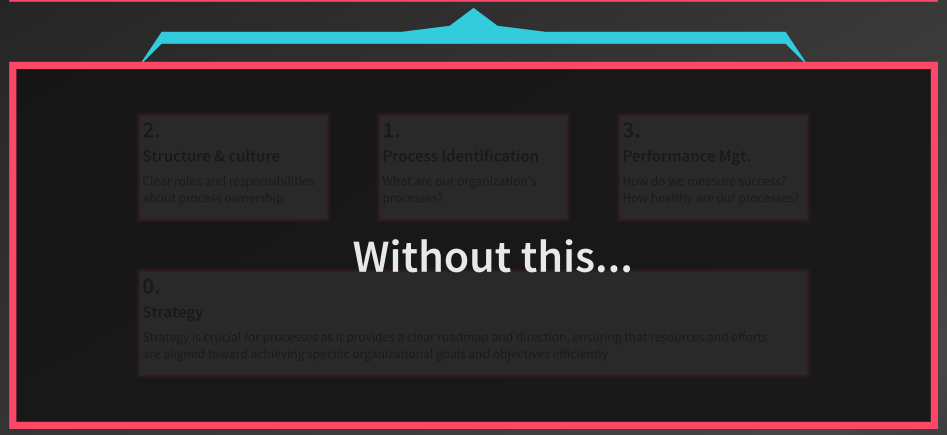
THE CYCLE AND THE STRATEGY IN PRACTICE [1]



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WHAT

Business Engineering With Composability

WHAT

- Business engineering takes us from strategy to functions [10, 9]
- Big picture viewpoints
- End to end processes
- Composable *business* services
- ⁉ Yeah, yeah, but what about our *technical* services, eh?

HOW

I Don’t Think it Means What You Think it Means

jargon
language
lingo
slang
vocabulary
dictionary
terminology
internet
strategy
phrase
paper
innovation
challenge
philosophy
note
simplicity
written
minimalism
marketing
straightforward
easy
technology
text
understanding
training
message
smart
educate
digital
search
education
repeating
speech
communication
sayings
meaning
success
focus
talking
ideas
words
business
change
managment
definition
mentoring
page
leadership
learn
complicated
cogent
management
knowledge
explanation
literacy
connection
perfect
method
simple
word
english
approach
project
dialect
lexical
process
letters
detail
coherent
corporate
information

PROCESS

(BUSINESS) PROCESSES

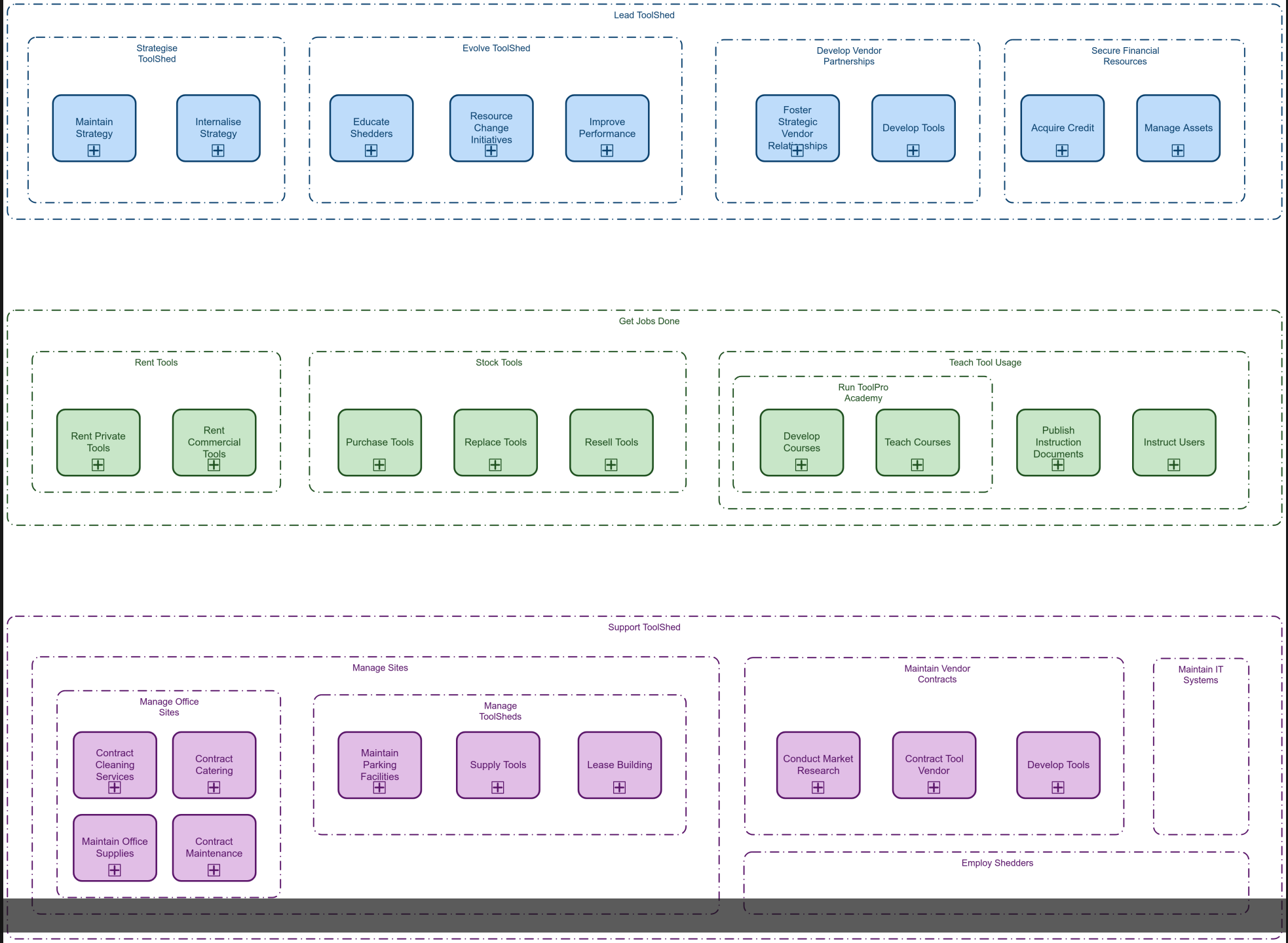
Definition

A (business) process is a series of related activities, events and decision points that is independently triggered by an event and collectively transform inputs into outputs and is executed repeatedly. The process encompasses all of the required resources and assets and is meant to deliver value (tangible and/or intangible) to customers and other stakeholders.

PROCESS ARCHITECTURE

PROCESS ARCHITECTURE

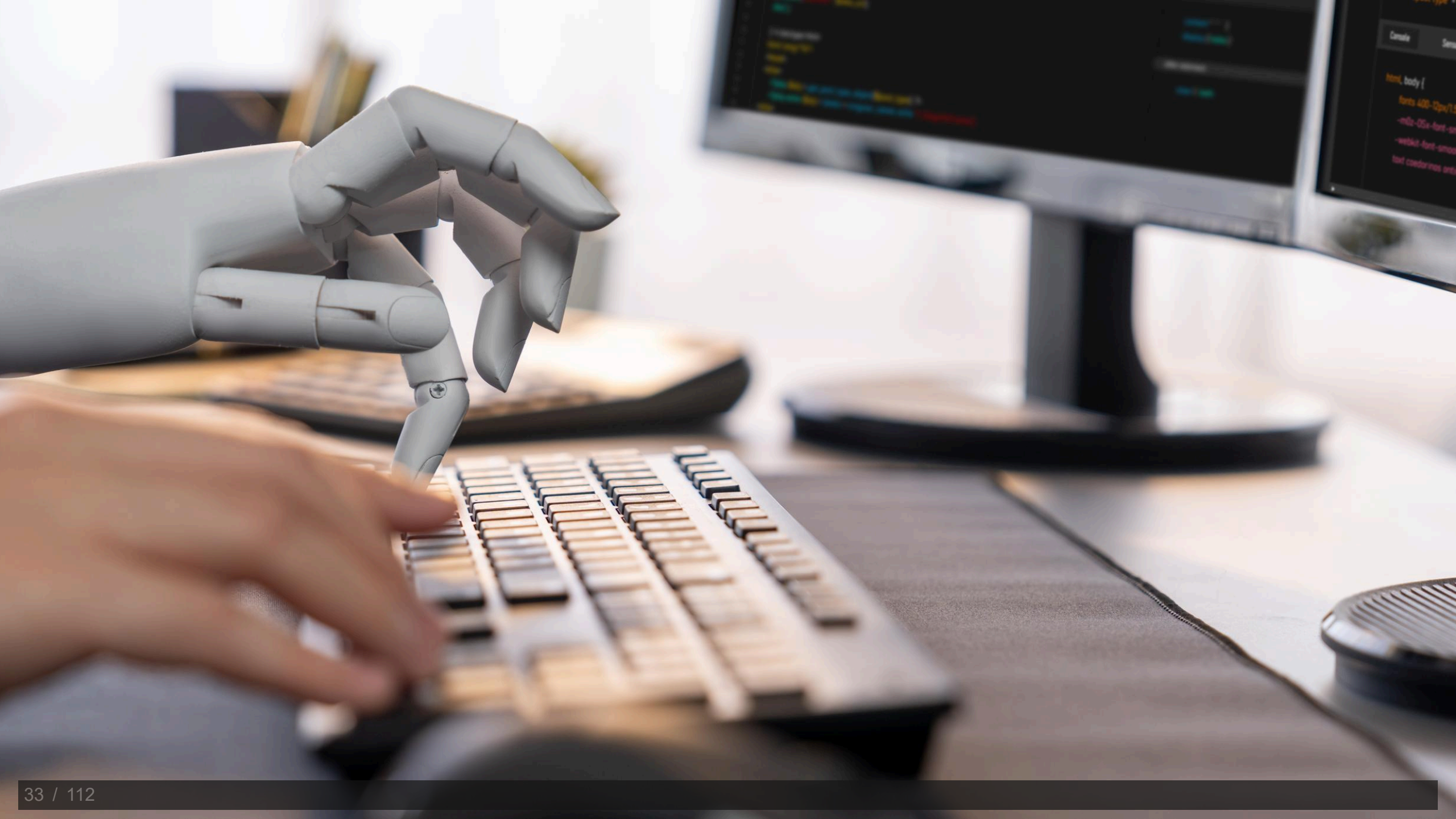
- The essential tool: the **Process Architecture** [18]
  - Identifies our processes that **execute** the strategy
  - Provides useful definitions for each of them, including **intent** [3]
  - Shows the relationships (hierarchy and sequence)
- Part of the *big picture thinking* by linking to business models and strategy
  - Customer journeys are composed of touchpoints with the process architecture
  - The process architecture [7, 16] as starting point for agile teams' stories


Lead ToolShed
Strategise ToolShed
Maintain Strategy
Internalise Strategy
Evolve ToolShed
Educate Shedders
Resource Change Initiatives
Improve Performance
Develop Vendor Partnerships
Foster Strategic Vendor Relationships
Develop Tools
Secure Financial Resources
Acquire Credit
Manage Assets
Get Jobs Done
Rent Tools
Rent Private Tools
Rent Commercial Tools
Stock Tools
Purchase Tools
Replace Tools
Resell Tools
Teach Tool Usage
Run ToolPro Academy
Develop Courses
Teach Courses
Publish Instruction Documents
Instruct Users
Support ToolShed
Manage Sites
Manage Office Sites
Contract Cleaning Services
Contract Catering
Maintain Office Supplies
Contract Maintenance
Manage ToolSheds
Maintain Parking Facilities
Supply Tools
Lease Building
Maintain Vendor Contracts
Conduct Market Research
Contract Tool Vendor
Develop Tools
Maintain IT Systems
Employ Shedders

SCOPING [2, 3]

PROCESS THINKING

TASK BASED WORKING



ORGANISATION

Setting Things Up

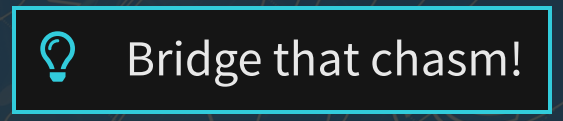
THE CHASM

Bridging the Gap

EXECUTION MODELS

THERE IS NO EXECUTION MODEL

- There is **no** "execution model"! [4]
- There are different levels of abstraction [1]
- There **is** an execut***able*** process model, where it **all comes together**
- Automate the business process, not the technical coordination of system activities (and workarounds 🙄)
- Be prepared for **change**!
- Are your batches really **batches**?
  - Look for opportunities to move to *straight-through processing* (STP) instead of automating legacy ways of working



1. that's the whole point the process architecture makes clear

A PRAGMATIC APPROACH

A PRAGMATIC APPROACH

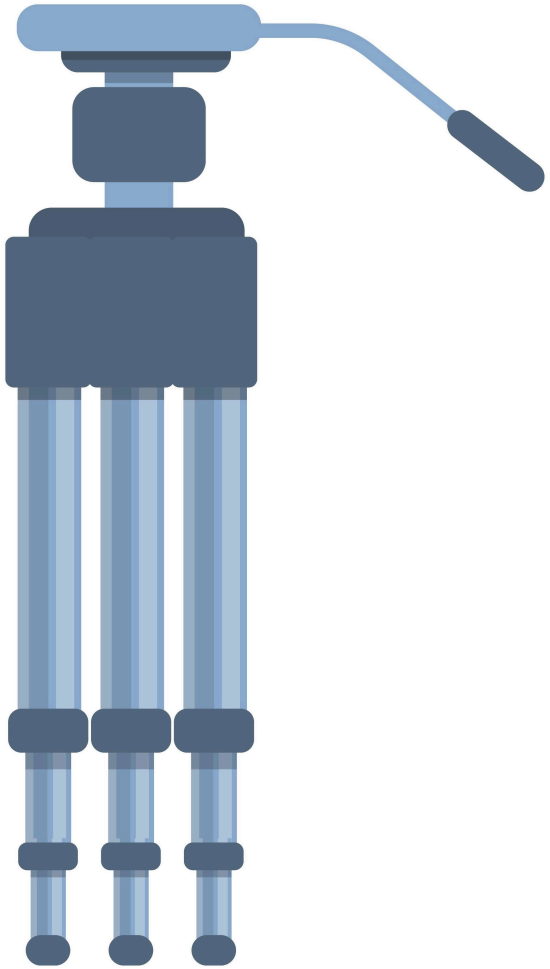
- Taking a *pragmatic approach*
- It **can** be straight-forward, if you keep a few things in mind
- A **deliberate** approach to taking process as a fundamental starting point for creating value [18, 13]
- Simple is best and is complicated enough 😉
- Automation comes later and is easier when we are better prepared

TRIPOD

Balancing the Act

TRIPOD

TRIPOD



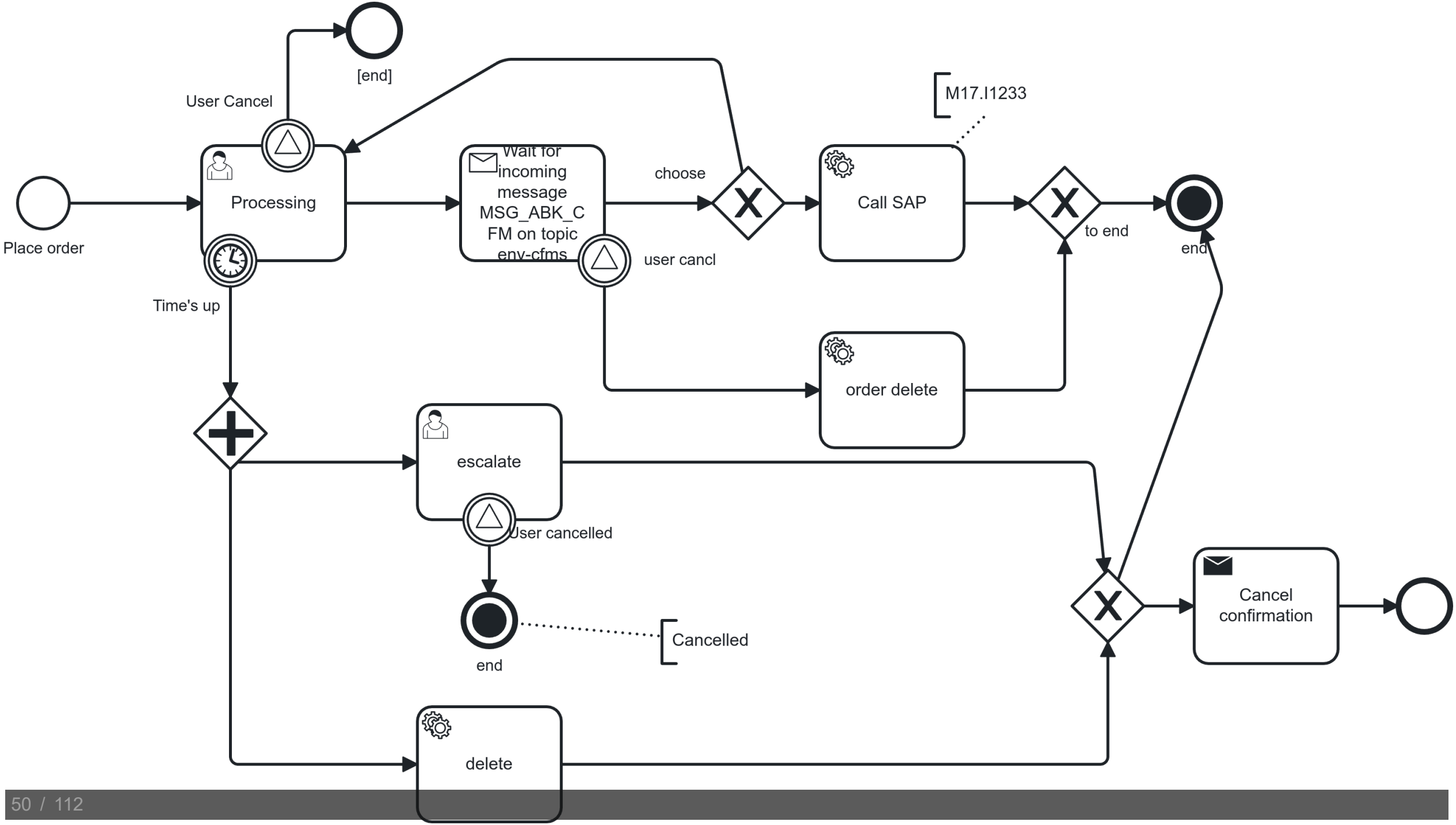
- Process Management
- Methods & Techniques
- Technology

It’s a balancing act to get the best picture!

BPMN

BPMN

- BPMN is **not** simple, not for everyone
  - Models and abstractions
  - Palette
- There’s lots of work to do and know about
- Training and guidelines help, but don’t eliminate mentoring


[end]
User Cancel
M17.I1233
Processing
Wait for incoming message MSG_ABK_CFM on topic env-cfms
choose
Call SAP
to end
end
Place order
user cancl
Time's up
order delete
escalate
User cancelled
end
Cancelled
Cancel confirmation
delete

ELOQUENT [11]

NAYSAYERS

Saying No to No

NAYSAYERS

- Explaining what we mean and returning to the why?
- Having a plan and showing results
- Asking rhetorical questions [15]
- The technology afterthought: no business otherwise
- You may be really special, but you’re not special, really

DOING THE RIGHT THINGS

Then Getting Them Right

1 research
4:35 Hours
internet
experience
in library
2 ideation
dialogue
brainstorming
idea
BIG cup of coffee
3 development
OK!
build it
plan
notebook
design
client feedback
4 revision
design it!
approval
risk
spend time

JUMPING THE GUN

TECHNOLOGY

INCREMENTAL PROCESS DESIGN

A NATURAL FIT: DDD AND PROCESS ORCHESTRATION

- Domain Driven Design [8]
- Aim for a collaboration of subject matter experts and technologists
- The **behaviour** in the domain is mapped to the **activities** in the process
- The **methods** of aggregates are mapped to the **tasks** in the process model
- Can be gradually built-up for complex processes

A TAKE ON DECISION RECORDS

- Track the **decisions** you make and the **rationale**: ADRs[1]
- How about a **PDR** log for Process Management?
- A section of the Process Management Record, perhaps?
- Document the **trade-offs** with their **consequences**
- The essential tool: the **Process Architecture** [18]

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1. *Architectural Decision Records* or ADRs, are a tool used in Software Architecture practice to identify, document and communicate decisions taken that affect the architecture of a system and the way the decisions were reached and choices were made

PATTERNS

PATTERNS AND RE-USE OPPORTUNITIES

- Ask a 16-year old
- Patterns **emerge**
- Re-use **evolves**

ARCHITECTURE

Positioning, Integration and Trade-Offs

ARCHITECTURAL POSITIONING

Taking Purpose to Structure

ARCHITECTURAL POSITIONING FOR PROCESS ENGINES

- A central[1] conductor in the landscape that knows all about the **specific subset of business logic** that is processes and decisions
  - **Control** - Informs people **and** systems when work needs to happen
  - **Decide** - Reacts to events, making decisions based on input
  - **Track** - Handles state management natively
- Extract process and decision logic to models, align and execute

1. From the perspective of its role, not necessarily **technically** centralised

HOW TO USE YOUR TOOLS

- Keep it lean and nimble: loosely coupled and **only** focussed on executing process and decision logic
- The process engine is all about **state management** [1] and workflow patterns
  - Durable state including versioning and data
  - Scheduling
  - Waiting
  - Retrying
  - Escalating
  - Compensating
- Compose your services landscape in models, conduct the orchestra in runtime

Use your process engine to **automate your *business processes***!

1. of process definition and instance data, that is (more to come)

ORCHESTRATION AND CHOREOGRAPHY [14]

MESSAGE NAMES

CAUTION!
WET
FLOOR

MUTATION EXCLUSIVITY

DROP-INS

NIH[1] AND PLATFORMS

- Check your business models: are we in the business of offering tools for process orchestration?
- In most cases: **don't** build your own tools
- Engines: You **will** need those advanced patterns, so you'll end up implementing and maintaining them
- Code generators and custom modelling tools *usually* underwhelm, disappoint or outright hinder your process automation initiatives

Invest in your methods and techniques instead by building a general-purpose platform or consider creating extensions

1. Not Invented Here

THE OUTSIDE WORLD

Integrating with Legacy and Future Legacy

LEGACY

- Composable IT ⇒ composable business services [12 pp. 33-36]
- Fit for purpose APIs
  - Primacy of process: *raison d'être*
  - Scaling?
- They all want your processes
  - But can't handle BPMN's magic
- Service mapping and scaling to ever more automation

TRADE-OFFS

Context is Everything

MULTI-TENANCY

CASE MANAGEMENT

SIZING AND -ILITIES

ENCRYPTION

ARCHITECTING FOR CHANGES

TECHNOLOGY

Bits, Bytes and Pieces

DATA

What It’s All About

DATA

- Be strict about data in automated processes [1, 6]
- Three kinds of data used:
  - **Identifying** data
  - **Control** data
  - **Orchestration** data
- Otherwise, to mention a few of your potential problems…
  - Data synchronisation issues and potential data leaks
  - Data storage issues
  - Increased migration complexity
  - Service responsibility drift
  - Process versioning

HONORABLE MENTION: TASK SCREENS

- Terminology: task based working
- What is the task really?
- What if things change? [5]

TESTING

Did It Work?

TESTING - IT NEEDS REAL WORK AND IT’S NOT THERE YET

- Standing the test of **time**
- Standing there are **utilities** required
- Standing in the **tempest** and moving targets

SOURCE CODE

Understanding What’s Going On

function getSelftAndParents(data, id) {
var self = getObj(data, id),
parents = [];
if(self){
parents.push(self);
if(self.pId){//If pId is not 0.
parents = parents.concat
(getSelftAndParents(data,
self.pId));
}
}
return parents;

BITS AND PIECES

(pun intended)

THERE IS NO DATABASE

OPERATE IMPORT

MULTI-INSTANCE VARIABLE SCOPING

CORRELATION IS HARD

WORKERS THAT WORK

BACKPRESSURE

RESET THE WORLD

VERSION TAGS

ERRORS, EXCEPTIONS, FAULTS AND (IN)VALID OUTCOMES

QUESTIONS

WRAP UP

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